Amendments to the Specification:

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph:

--In a still further embodiment of the invention, a method is provided for monitoring and tracking shelf life for a food item by providing identity data identifying a food item, identifying a first location of the food item, and automatically determining a shelf life for the food item as a function of the identity of the first location. In one aspect of this embodiment, the method determines a first date on which the food item is placed at the first location, and then, automatically determines a first expiration date for the food item as a function of the identity of the first location and the first date. Thus, the method permits food rotation to be optimized, so that ingredients with the ~~oldest~~ closest expiration dates can be accurately and quickly found and spoilage of food in inventory can be eliminated. Further, the present invention permits new product rotation labels to be accurately and quickly printed on the floor at the location where the label is to be applied. Further, such labels include all pertinent information in coded as well as human readable form so that the information on the label can be accurately and quickly entered into the system by a scanning process.

Please replace the paragraph beginning at page 8, line 24, with the following rewritten paragraph:

--Referring to ~~Fig.~~ Figs. 1 and 2, a monitoring and tracking system 20 includes a portable hand-held data collector 22, a central computer 24 and a communications link 26 providing electrical communications between the data collector 22 and central computer 24. Referring to Figs. 1 and 2, the data collector comprises a main body including a pistol grip 28, a temperature sensing probe 30 electrically connected to the body 28 by a communications link 32 and a printer 34 electrically connected to the body unit 28 by a communications link 36. The main body 28 of the data collector 22 has a data processor 38, for example, an 8 bit PIC microcontroller, mounted therein. The microcontroller 38 is in electrical communication with a reader 40, for example, a bar code reader and a communications unit 42, for example, a wireless transmitter/receiver or transceiver. The transceiver 42 is a UHF, for example, a line-of-sight 900 MHZ, transceiver. In a known manner, the transceiver 42 uses two transmitters that are close in frequency, for example, 906 MHZ and 915 MHZ. The microcontroller 38 initiates communications using one transmitter; however, if a link cannot be established, the microcontroller 38 then initiates communications with the second transmitter. The output of the transmitters is amplified and filtered in an LC filter in a known manner prior to feeding an antenna. The transceiver 42 and all other transceivers in the system comply with FCC regulations.--

Please replace the paragraph beginning at page 9, line 18, with the following rewritten paragraph:

--In addition to its internal memory, the microcontroller 38 is connected to external memory 48 which normally is a nonvolatile memory such as an EEPROM. The microcontroller 38 is also in electrical communications with user input/output ("I/O") devices 44. The user I/O 44 can include a user input device, for example, a pushbutton and/or keypad 45 (Fig. 2), or an output device, for example, an audio sound generator 46, or a display 47, such as an LCD screen, etc. The keypad 45 normally has a set of keys or pushbuttons that in a known manner have alpha/numeric or functional identities.--

Please replace the paragraph beginning at page 9, line 27, with the following rewritten paragraph:

--The temperature probe 30 and the other temperature sensors identified herein may detect temperature is several different ways. For example, the temperature probe 30 may be a resistance temperature device, a thermocouple, an infrared detector, etc; however, in the described embodiment, the temperature probe 30 uses a thermocouple to detect changes in temperature of the food. An analog temperature signal from the thermocouple temperature probe 30 is amplified by an analog operational amplifier ("op amp") 54. A second op amp 56 operates with a digital to analog converter ("DAC") 58 to provide an analog signal to ~~a~~ an analog to digital ("AID") converter ~~60~~ 59 that is within the range of the A/D converter ~~60~~ 59. The operation of the DAC 58 and op amp 56 permit the relatively narrow magnitude range of the AID converter ~~60~~ 59 to accommodate the much wider magnitude range of the output signal from the thermocouple sensor 30. In operation, when the microcontroller 38 samples the output from the AID converter ~~60~~ 59 and determines that the output is saturated or at its maximum value, the microcontroller 38 provides a known value to the DAC 58 which functions to offset or reduce the magnitude of the analog signal output from the op amp 56 by a fixed amount. The microcontroller 38 again checks the output from the A/D converter ~~60~~ 59; and if it is still at a maximum, the microcontroller 38 increments the magnitude of the signal to the DAC 58 by another fixed amount. That process continues until the microcontroller 38 detects that the output from the AID converter ~~60~~ 59 is no longer saturated. The microcontroller 38 then stores the output from the AID converter ~~60~~ 59 with the amount of offset that it provided to the DAC 58.--

Please replace the paragraph beginning at page 11, line 18, with the following rewritten paragraph:

--In addition to the temperature probe 30 of the data collector 22, other temperature measuring devices may be used to monitor food temperature during the food handling and preparation process. A temperature measuring device, for example, a temperature sensor, 60 is often permanently located in association with food storage device, for

example, a freezer, a deep chiller, a refrigerator, etc. A sensor identical to the temperature sensor 60 may also be used to measure food temperature in a cooking pan or other container, a serving pot or bowl, or a salad bar. Temperature sensors can also be integrated within the structure of a cooking utensil, for example, a ladle or spoon. In this embodiment, the temperature sensor 60 is a thermocouple and is connected to a remote transceiver 62 via a temperature sensor conditioning circuit 61. The conditioning circuit 61 is comprised of circuits identical to the op amps 54, 56, DAC 58 and A/D converter ~~60~~ 59 within the data collector 22 and operate as previously described. While only a single temperature sensor 60 is illustrated as being connected to the remote transceiver 62, as will be appreciated the remote transceiver 62 may be designed to be connected to and service a plurality of temperature sensors each with its own temperature sensor conditioning circuit.--

Please replace the paragraph beginning at page 16, line 15, with the following rewritten paragraph:

--The central computer 24, at 304, executes an HACCP analysis using the programmed ~~the~~ receiving temperature range in Fig. 4 to determine whether the food packages entering the facility conform to accepted temperature specifications. While not mandated, the HACCP analysis provides temperature and time specifications that are widely accepted and followed in the food handling and processing industry. If, at 305, the HACCP analysis results in detecting a nonconformance of the measured temperature with desired temperature specifications, then, at 306, an alert is activated. The alert may be audible, visual or any sensory perceptible alarm and can be activated at the central computer 24. However, normally, an alert signal is transmitted from the central computer 24 to the hand-held data collector 22; and an audible, visual or other alert signal is presented to the user of the data collector 24. For example, the computer 24 may either instruct the user to print or, directly command the printer 34 to print, a reject label. Alternatively, the computer 24 may send a message to the data collector 22 displaying the out of range reading and allow the user of the data collector 22 to make a decision. Alternately, the computer 24 may send a message to the data collector 22 to call a manager for a decision. In a further alternative, one or more of those corrective actions may be taken depending on how far out of range the measured temperature is. In addition, other alert signals may be automatically transmitted to an offsite location, for example, an office location where out-of-temperature data is monitored. As shown in Fig. 6, the system also maintains a table of alerts and the corrective action taken. If on receiving out of temperature food, a decision other than to reject the food item is made, the system requires that some entry of a corrective action be made.--

Please replace the paragraph beginning at page 17, line 14, with the following rewritten paragraph:

--The HACCP analysis, at ~~302~~ 304, also determines an expiration date, that is, the date after which the food package should not be used. The central computer contains a shelf life table, as shown in Fig. 7, that lists all food types that may be found in inventory, all food items associated with each of the food types and the shelf life of each food type at each location in the facility. Thus, knowing the food type and location information, the computer 24 reads a shelf life value from the shelf life table and then calculates an expiration date for the food item. The expiration date is then stored in the inventory table of Fig. 5 in association with the food item.--

Please replace the paragraph beginning at page 21, line 20, with the following rewritten paragraph:

--When the user desires to make a recipe, at 319, the user enters the identity of the recipe, for example, meat stew, in the central computer 24. Again, to simplify use of the system, a placard may be placed in the facility that has codes for all the available recipes in human readable and bar code forms. The recipe code is entered manually via the keypad 45 or the scanner 40. The central computer 24, at 320, first creates a batch number for the meat stew recipe, that is, a number that uniquely identifies prepared meat stew. The computer 24 then scans the inventory table and identifies the food item ingredients of the recipe that have the ~~oldest~~ closest expiration dates, thereby reducing the probability of a loss of food through spoilage. Next, a hard copy of the recipe is printed. Printers 70 can be connected to the central computer 24 or any of the base transceivers 41 and placed at different locations within the food processing facility Thus, a user can have the recipe printed at any convenient location. With the printed recipe, a person with a remote data collector 22 selects an ingredient, for example, chicken, and goes to the location of the chicken, for example, a chiller. Then, at 322, the first product rotation label 52 on each package of chicken within the cold storage unit is scanned with the scanner 40. If, at 324, the information on the bar code label 52 does not correspond to the desired package identified by the central computer 24, no signal is given. However, when the user scans a food rotation label of chicken having an expiration date corresponding to the expiration date identified by the central computer 24, at 326, an audible signal is produced by the audio signal generator 46 which identifies that package of chicken as the one that should be used. As will be appreciated, while an audio signal is more efficient to identify the food package, the audio signal may be complemented or substituted with a visual message on the display 47.--

Please replace the paragraph beginning at page 28, line 6, with the following rewritten paragraph:

--In addition, as recipes are selected, the monitoring and tracking system of the present invention automatically identifies the oldest food items in inventory and their respective locations, and the system provides an accurate and efficient semiautomatic process for finding those items at their locations. Thus, the ingredients with the ~~oldest~~ closest expiration dates can be accurately and quickly found, so that food items do not spoil in inventory. This feature can completely eliminate spoilage and having to dispose of food in inventory which represents a substantial savings to the user.--